

- ing the user interface action is based on the at least two individually determined forces.
17. The processing system of claim 15, wherein the velocity being based on the first force comprises: applying a function to the first force and the first distance to obtain the velocity.
18. The processing system of claim 15, wherein calculating the third direction comprises: determining an antecedent landed input object of the at least two input objects, and calculating a direction of a vector between the second touchdown location of the antecedent landed input object and the second subsequent location of the antecedent landed input object.
19. The processing system of claim 15, wherein calculating the third direction is based on the second touchdown location and the second subsequent location of both of the at least two input objects.
20. The processing system of claim 19, wherein calculating the third direction comprises calculating an average of the second touchdown location and the second subsequent location of both of the at least two input objects.
21. The processing system of claim 15, wherein calculating the second distance comprises: determining an antecedent landed input object of the at least two input objects, and determining the second distance between the second touchdown location of the antecedent landed input object and the second subsequent location of the antecedent landed input object.
22. The processing system of claim 15, wherein calculating the second distance is based on the second touchdown location and the second subsequent location of both of the at least two input objects.

23. The processing system of claim 15, wherein calculating the second distance comprises calculating an average of the second touchdown location and the second subsequent location of both of the at least two input objects.

24. An indirect input device comprising:

- a plurality of sensor electrodes configured to generate sensing signals; and
- a processing system connected to the plurality of sensor electrodes and configured to:
  - determine a first touchdown location of an input object,
  - determine a first subsequent location of the input object,
  - calculate a first direction and a first distance between the first touchdown location and the first subsequent location,
  - move a cursor representation on a display in a second direction and at a velocity, the second direction defined by the first direction, the velocity based on the first distance and a first force imparted by the input object on an input surface,
  - detect a touchdown event of at least two input objects,
  - determine a second touchdown location of the at least two input objects,
  - determine a second subsequent location of the at least two input objects,
  - calculate a third direction and a second distance from the second touchdown location and the second subsequent location, and
  - modulate a user interface action in a fourth direction at a magnitude, wherein the fourth direction is based on the third direction, and wherein the magnitude is based on the second distance and a second force imparted onto the input surface.

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